South Dakota Department of Health

PUBLIC HEALTH BULLETIN

VOLUME 20 NUMBER 2 **MARCH 2008**

In this issue:

South Dakota's child flu vaccination initiative reaches 80,000 kids

In its first season, South Dakota's Child Influenza Vaccination Initiative gave 82,561 doses of flu vaccine to kids from age 6 months through 18 years. In comparison during the 2006-2007 flu season, only 19,000 kids in the same age groups had flu shots.

Governor Rounds announced the initiative in September 2007, targeting kids because they account for a significant percentage of flu cases and hospitalizations each year and help spread the disease in communities. During the 2006-2007 flu season, 70% of South Dakota's cases were 19 and younger while 43% of flu-related hospitalizations were 10 and younger.

The Department of Health Immunization Program purchased the flu vaccine and supplied it to local clinics, as it does with other childhood vaccines such as measles and diphtheria. The department has notified vaccine providers that the initiative is ongoing and they will be able to order child flu vaccine through the Immunization Program again for the 2008-2009 flu season.

The department used its immunization registry, the South Dakota Immunization Information System, to track doses administered and to determine gaps in coverage, both geographic and demographic. Preliminarily, data show the highest immunization rates among the elementary school and younger age groups, with middle and high school students showing lower coverage levels. A detailed evaluation of the initiative will be completed after the flu season.

Cryptosporidiosis in South Dakota

By Lon Kightlinger, MSPH, PhD, State Epidemiologist, Department of Health
Nicholas Hill, MPH, Disease Surveillance Manager, Department of Health

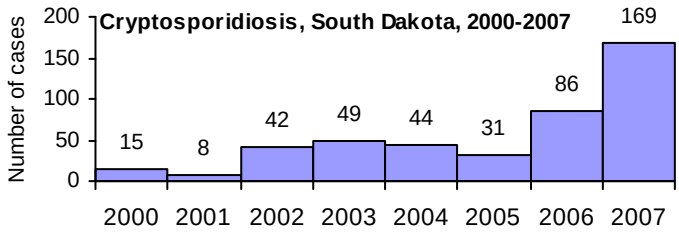
For the past 2 years cryptosporidiosis has been increasing in South Dakota and the United States. Cryptosporidiosis (known more simply as "Crypto") is an intestinal disease caused by a microscopic parasite, *Cryptosporidium*. Crypto illness is characterized by diarrhea, vomiting, abdominal cramps, nausea, appetite loss, dehydration and fever. People with crypto are usually ill for 1-2 weeks in recurring episodes. Babies and young children can be at risk of serious illness if they become dehydrated. In normally healthy people the symptoms are very unpleasant, but a crypto infection can be life-threatening in severely immuno-suppressed people.

Crypto is transmitted by eating or drinking food or water contaminated with microscopic *Cryptosporidium* cysts (oocysts). One may also become ill by touching your mouth with contaminated fingers. After ingesting the crypto cyst a person becomes ill in 7 days (range 2-10 days). The infectious cysts may come from other humans, cattle or to a lesser extent from dogs, cats, rodents, birds or other animals. An infected person may excrete up to 1 billion crypto cysts in a single bowel movement, so proper hygiene is very important for preventing spread to others.

Those at highest risk of crypto infection include:

- Children in day-care centers, including diaper-wearing children;
- Child care workers;
- Parents, siblings and care-givers of infected children;
- People who handle infected cattle or their manure;
- People who take care of other people with crypto;
- Backpackers, hikers, and campers who drink unfiltered, untreated surface water;
- People, including swimmers, who swallow water from contaminated sources, such as swimming pools, water parks, lakes, rivers and stock dams;
- International travelers;
- People exposed to human feces through sexual contact with an infected person.

Crypto is diagnosed by laboratory testing of fecal samples. Infections can be treated with nitazoxanide, an anti-parasitic drug prescribed by a physician, and by preventing dehydration.



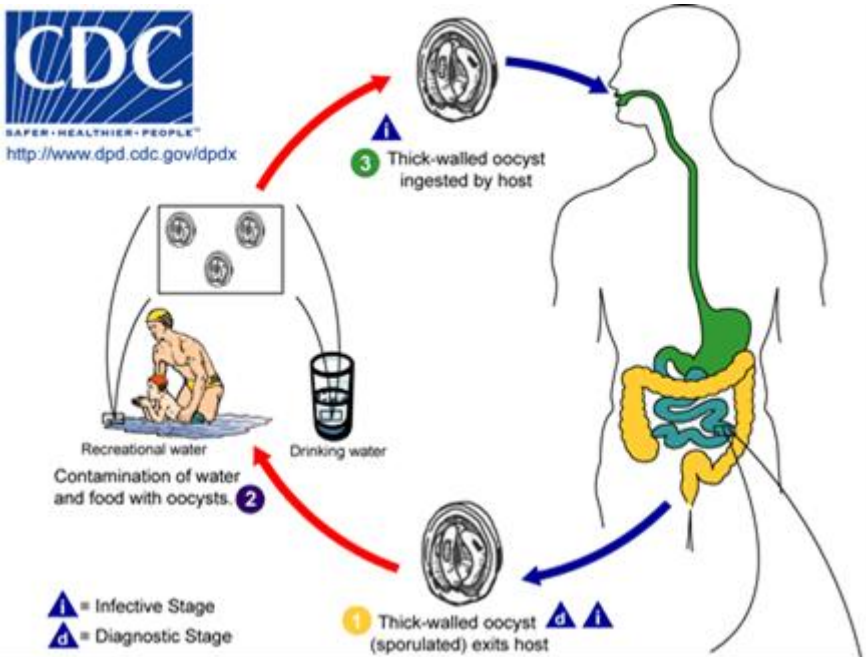
In South Dakota, since 2000, there have been over 400 cases of crypto reported to the Department of Health with dramatic increases in the past few years (see chart).

In 2007 there were 169 cases of crypto reported in South Dakota. Nearly all, 97%, of the cases were residents of East River South Dakota. There were equally 50% of cases male and female. Over half, 51%, of the South Dakota crypto cases were children 10 years old and younger.

Cryptosporidiosis prevention

- Do not swallow recreational water.
- Wash your hands frequently with soap and water, especially before eating or preparing foods and after using the toilet.
- Do not drink untreated water from lakes, rivers, springs or untested wells.
- If you need to drink questionable water: boil the water for 1 minute or filter water with a 1 micron or smaller pore filter, or a filter that is rated for cyst removal. Crypto cysts are very hearty, so do not rely on chemical disinfection.

Lifecycle of cryptosporidium



For more information see the cryptosporidiosis fact sheet on the South Dakota Department of Health's website at www.doh.sd.gov/DiseaseFacts. The Centers for Disease Control and Prevention website at www.cdc.gov/ncidod/dpd/parasites/cryptosporidiosis provides more detailed information for the general public and, health care providers, as well as control measures for child care settings, guidance for water filters and bottled water, guidance for people with compromised immune systems, laboratory diagnosis and traveler suggestions.

South Dakota 2007 Perinatal Health Risk Assessment Report

By Jenny Williams, Perinatal Nurse Consultant, Department of Health

In 1997, as part of its mission to ensure healthy women, children, and families, the South Dakota Department of Health conducted the first survey of new mothers with infants ranging in age from newborn to eight months old. Since then this survey has been conducted every other year and was completed for the sixth time in 2007.

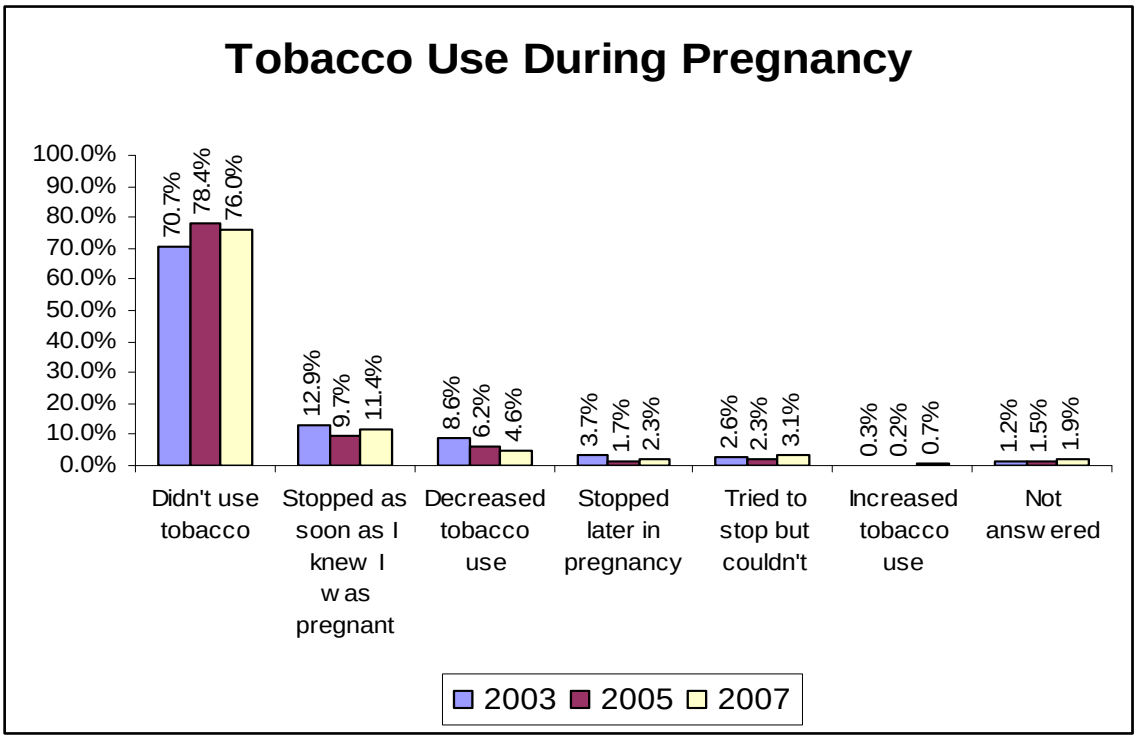
New mothers were asked questions about behaviors prior to conception such as tobacco and alcohol use and about health care and education received during the pregnancy. Mothers were also asked about infant health care and behaviors such as car-seat use and infant sleep position. Questions on mother's drug use or possible physical abuse were added for the first time in 2007.

Questions in the survey are chosen to provide information that will help the South Dakota Department of Health develop targeted program interventions. The information is useful to both private and public health care providers in tailoring health care services to the needs of prenatal clients and infants in South Dakota.

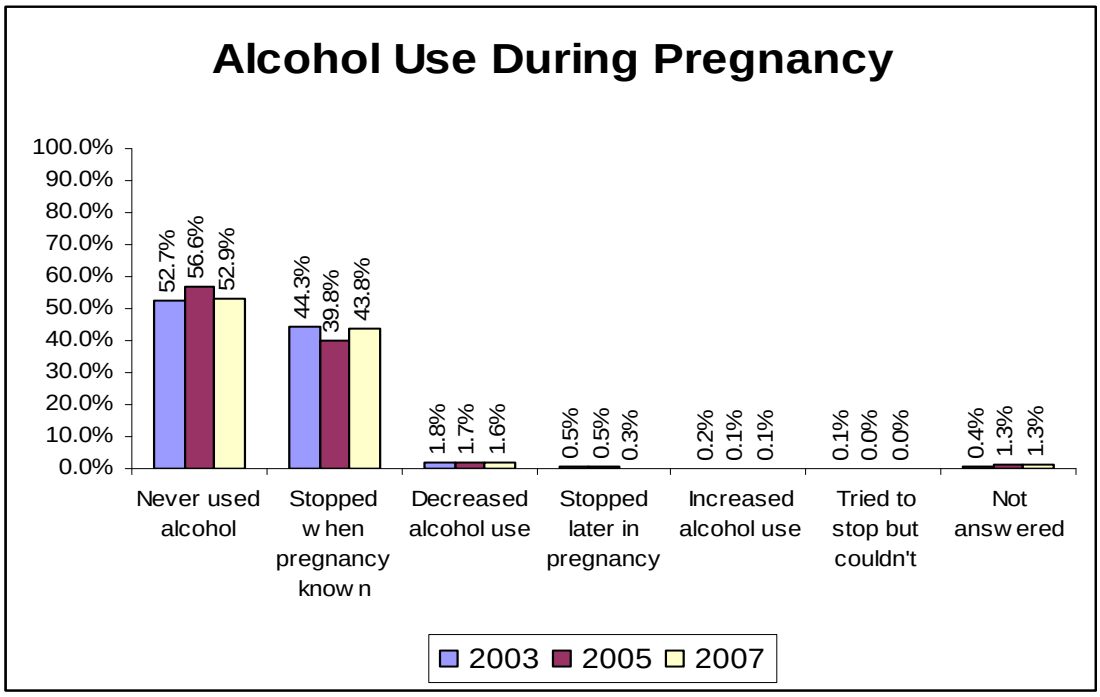
The 2007 report is now available and can be accessed at www.doh.sd.gov/Statistics/PDF/2007Perinatal.pdf . If you have any questions or would like to request a printed copy of the full report, please contact Jenny Williams at Jenny.williams@state.sd.us or call 773-6286.

It is important to realize that the information in this report is based on data that is self-reported. Some of the highlights of the survey are:

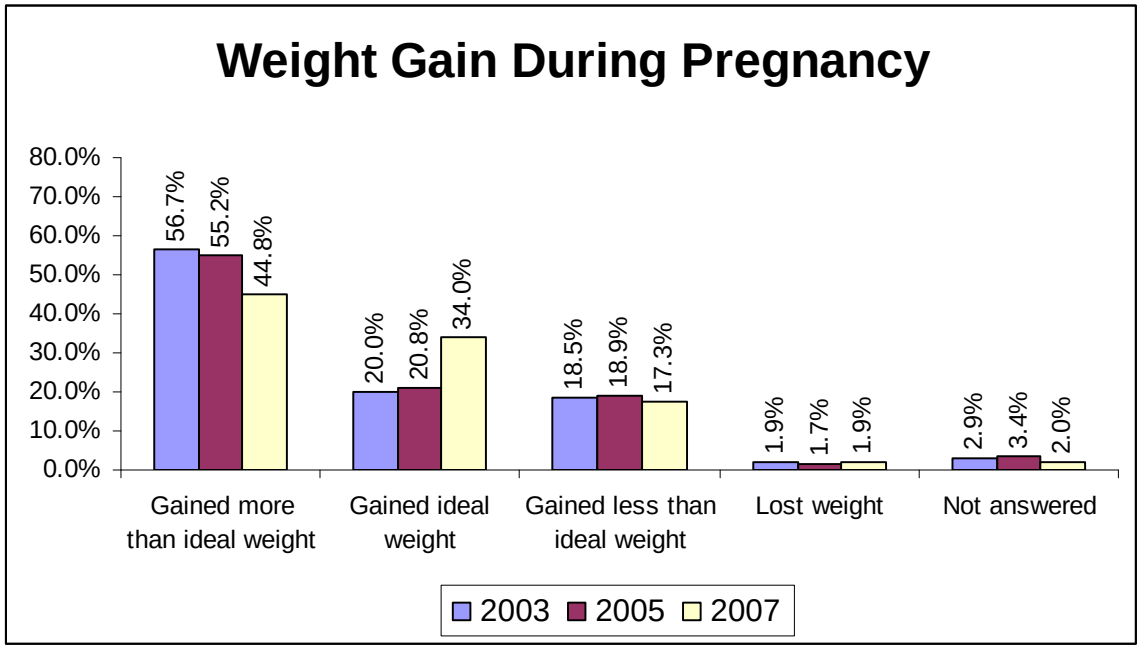
- **Intendedness of Pregnancy:** 68 % of survey respondents reported that they intended to be pregnant then or had wanted to be pregnant sooner. This is very near the Healthy 2010 goal of 70% intendedness of pregnancies among 15 to 44 year old women. This is an increase from 63.9% in 2005.
- **Folic Acid:** 62.4% of respondents say they took a multi-vitamin or folic acid supplement prior to pregnancy. This has increased from 41.6% in 1999, 53.1% in 2003, and 58.9% in 2005. 82.9% of women said they had been told by a healthcare provider about the importance of folic acid in reducing birth defects.
- **Smoking:** Over 77% of women say they were informed of the harmful effects of smoking while pregnant.
  In the three months prior to their pregnancy, 79% of the women stated that they didn't smoke at all, and 17.8% of the women smoked fewer than 20 cigarettes per day.
  Of the 896 women who responded to the survey, 76% reported that they didn't smoke during pregnancy. Another 11.4% said they quit smoking as soon as they knew they were pregnant, and 2.3 % stopped smoking later in the pregnancy.
  When questioned about second hand smoke exposure for their babies, 90% of the new mothers reported that smoking is not allowed at any time in the house or car, compared to 85.4% in the 2005 survey.



- **Alcohol:** More than half or 52.3 % of the survey respondents did not drink alcoholic beverages in the three months prior to the pregnancy.
  52.9% of those surveyed said they did not use alcohol at all during their pregnancy, and 43.8% reported that they stopped consuming alcohol as soon as they knew they were pregnant. 75.3% of the respondents said they remember a health care professional informing them of the dangers of drinking while pregnant.



- **Illicit Drugs:** 2007 is the first year new mothers were questioned about illicit drugs use. 51.2% of the respondents report that a health professional discussed the harmful effects of drug use on their baby, and 2.3% admitted using marijuana or hashish during the three month before they became pregnant.
- **Sleep Positions of Baby:** 84.3% of new mothers responding to the survey reported that their infants slept on their backs, and an additional 8.4% slept on their sides. Of the babies that were placed on their backs, 84.5% of the mothers chose to do so because of the recommendation of a doctor or nurse.
- **Weight Gain:** Only 34% of the respondents stated they had gained the recommended amount of weight during the pregnancy, but this is up from 20.8% in 2005. 44.8% reported gaining more than the recommended weight, which is down from 55.2% in 2005. 17.3% stated they gained less than the recommended amount of weight, down from 18.9% in 2005. 78.9% of the women surveyed said that a health care provider talked to them about what they should eat during pregnancy.



- **Breastfeeding:** Information on breastfeeding was received by 89% of the respondents and 78% were breastfeeding their babies at the time of hospital discharge.
- **Car Seat Safety:** 96.8% of mothers report they always place their baby in a car seat for travel. Reasons listed for those who didn't use the car seat every trip were that the baby needed feeding or a diaper change, baby was crying, or it took too much time to place baby in the seat.

An Overview of the South Dakota Newborn Screening Program

By Lucy Fossen, RN, Newborn Screening Program
Office of Family Health, South Dakota Department of Health

South Dakota began newborn screening for phenylketonuria (PKU) in 1973 and Congenital Hypothyroidism in 1982. Efforts to computerize the linking of newborn screening test results to the birth certificates began in 1986. A Newborn Screening Task Force reviewed the program in 1987 to address standardizing and coordinating efforts of the Department of Health, laboratories and physicians across the state. In 1991 Administrative Rules were adopted and revised to mandate galactosemia screening and in 1995 a team of outside professionals with expertise in newborn screening were invited to review all aspects of the program. From this review, a centralized designated laboratory was recommended.

In 1997 a designated centralized laboratory relationship began with Clinical Laboratories of the Midwest; name has since been changed to Sanford Laboratories. Optional Screening for hemoglobinopathies was available per physician order 1997 and by 1999 Tandem Mass Spectrometry (MS/MS) testing began. Tandem Mass Spectrometry is a sensitive and specific methodology for detecting disorders of amino acid, fatty acid, and organic acid metabolism, including PKU. This testing called SuppNBS (Supplemental Newborn Screening) including MCAD (Medium Chain Acyl-CoA Dehydrogenase Deficiency), was available through the program for physicians to order. Testing was performed by the Institute of Metabolic Disease at Baylor University Medical Center, Dallas, TX.

By June 2005, through the Electronic Vital Records Screening System (EVRSS) 98% of the Newborn Screening metabolic records were being matched to the birth record by 2 weeks of age. Newborn Screening expanded testing to include hemoglobinopathies, congenital adrenal hyperplasia, biotinidase deficiency, amino acid disorders, fatty acid oxidation disorders and organic acidemias. Cystic Fibrosis screening was offered as an optional test. The expanded newborn screening tests were preformed by the New England Newborn Screening Program, University of Massachusetts Medical School.

Through the Administrative Rule process, Cystic Fibrosis screening was added to the mandated newborn screening panel. Following a Request for Proposal process for newborn screening laboratory services, the South Dakota Newborn Screening Program entered into a contractual agreement with the University of Iowa Hygienic Laboratory to begin June 1, 2007 with screening for Cystic Fibrosis.

New born Screening Program Launches Long-Term Follow-Up
South Dakota Newborn Metabolic Statute 34-24-24 states, *"It shall be the responsibility of the department of health to follow the development of all children carrying the syndrome of any metabolic disease to ensure that those persons responsible for the care of the child are fully informed of accepted medical procedures for the detection, prevention, and treatment of such condition."*

To comply with the statute, the South Dakota Department of Health began to develop a Metabolic Long-Term Follow-Up Program in November 2007. Long-term follow-up begins when a child who is a resident of South Dakota has a diagnosed metabolic disorder and continues up to age 21. Long-Term Follow-up (LTFU) will track the health and developmental status of the child to help ensure a continuum of care. Communication will be established with

the primary care provider, specialty care providers, or other support services and the parent/caregiver. This will help ensure parents/caregivers are fully informed of the care and treatment of the metabolic disorder. Data collected will be used to identify needed resources for families impacted by metabolic disorders and barriers encountered in accessing those resources. A brochure detailing the South Dakota Metabolic Follow-Up Program will soon be available for physicians and parents.

2000-2007 Newborn Screening Outcome Data

South Dakota metabolic records are matched with birth records to accurately reflect the number of infants screened. Data Source: Electronic Vital Records and Screening System (EVRSS), Department of Health - Data collected 11/30/2007 and 01/18/2008 with 2007 data provisional. Data does not include variant forms of the metabolic disorders, hemoglobinopathy traits, or carriers of cystic fibrosis.

Year	Births	Never Tested	PKU	CH	GAL	BT	CAH	HB	Ex. Screen	CF
2000	10,589	36; expired = 32	0	4	1	N/A	N/A	N/A	N/A	N/A
2001	10,786	41; expired = 36	2	6	0	N/A	N/A	N/A	N/A	N/A
2002	11,015	41; expired = 38	1	3	0	N/A	N/A	N/A	N/A	N/A
2003	11,504	40; expired = 32	0	4	0	N/A	N/A	N/A	N/A	N/A
2004	11,805	60; expired = 57	1	6	1	N/A	N/A	N/A	N/A	N/A
2005	11,909	54; expired = 42	0	3	1	0	0	0	3	N/A
2006	12,387	51; expired = 39	1	5	0	0	0	2	4	N/A
2007	12,811	68; expired = 51	0	9	1	0	0	2	0	1

Intervention Data

The following data is grouped by condition and shows South Dakota's average /ranges for 2006. In some cases "intervention" (family consultation, evaluation, and monitoring of the newborn) occurred well before the age actual treatment was initiated, as treatment was pending confirmatory testing and diagnosis.

The data also includes national averages/ranges according to the most recent available data from the National Newborn Screening and Genetics Resource Center, http://genes-r-us.uthscsa.edu/. Data for this section was run on 12/05/2007. Comparison should be made with caution. States and territories included in the averages in this report have birth numbers from fewer than 2,000 per year to around 500,000 per year. Likewise, resources necessary to complete testing, follow-up, confirmation, diagnosis and treatment also vary from state to state. Intervention data is one kind of outcome data that can, over time, help identify how well a state's system is working in newborn screening. The mean average age at time of treatment can be an indicator of whether adequate resources are devoted to each component of a comprehensive newborn screening system: education, specimen collection handling and transportation procedures, laboratory procedures, follow-up and referral procedures, confirmation and treatment.

Biotinidase Deficiency

South Dakota 2006 Intervention Data	U.S. 2006 Intervention Data
Goal age for treatment initiation: Upon Diagnosis	43 States reported data
# diagnosed/treated: 0 profound 2 partial deficiency's treated	35 cases of profound biotinidase deficiency reported
Mean avg. age at initiation of treatment: 32.5 days	2 cases or 6% treated by 7 days of age 13 or 37% treated between 8-14 days of age 3 or 9% treated between 15-21 days of age 8 or 23% treated at > 21 days of age 9 or 25% age of treatment unknown/not reported
Range of ages at initiation of treatment: 25 - 40 days	Range of ages at treatment initiation: 4-> 21 days

Congenital Adrenal Hyperplasia

South Dakota 2006 Intervention Data	U.S. 2006 Intervention Data
Goal age for treatment initiation: Upon Diagnosis	45 States reported data
# diagnosed/treated: 0	138 cases
Mean avg. age at initiation of treatment: N/A	59 cases or 43% treated by 7 days of age 47 or 34% treated between 8-14 days of age 5 or 4% treated between 15-21 days of age 13 or 9% treated at > 21 days of age 14 or 10% age of treatment unknown/not reported
Range of ages at initiation of treatment: N/A	Range of ages at treatment initiation: <3 - > 21 days

Congenital Primary Hypothyroidism

South Dakota 2006 Intervention Data	U.S. 2006 Intervention Data
Goal age for treatment initiation: Upon Diagnosis	49 States reported data
# diagnosed/treated: 5	1,634 cases
Mean avg. age at initiation of treatment: 8.2	390 cases or 24 % treated by 7 days of age 534 or 33% treated between 8-14 days of age 189 or 11% treated between 15-21 days of age 422 or 26% treated at > 21 days of age 99 or 6% age of treatment unknown/not reported
Range of ages at initiation of treatment: 6-13	Range of ages at treatment initiation: <3 - > 21 days

Galactosemia

South Dakota 2006 Intervention Data	U.S. 2006 Intervention Data
Goal age for treatment initiation: Upon Diagnosis	47 States reported data
# diagnosed/treated: 0	52 cases
Mean avg. age at initiation of treatment: N/A	27 cases or 52% treated by 7 days of age 8 or 15% treated between 8-14 days of age 2 or 3% treated between 15-21 days of age 3 or 6% treated at > 21 days of age 12 or 23% age of treatment unknown/not reported
Range of ages at initiation of treatment: N/A	Range of ages at treatment initiation: <3 - > 21 days

Hemoglobinopathies

South Dakota 2006 Intervention Data	U.S. 2006 Intervention Data
Goal age for treatment initiation: 60 days of age or less	47 States reporting data
Sickle Cell Anemia (S/S) = 0 Sickle Cell C Disease (S/C) = 0 S/Beta- Thalassemia = 0 # cases diagnosed/treated: Beta-thalassemia, F only = 1 Hemoglobin Disease Other = 1 (Combination Hb H and Hb E)	Sickle Cell Anemia (S/S) = 1,016 Sickle Cell C Disease (S/C) = 556 S/Beta- Thalassemia = 117 # cases diagnosed/treated (36 States reported data) Beta-thalassemia, F only = 67 Hemoglobin Disease Other = 3

Mean avg. age at initiation of treatment: Beta-thalassemia, F only = treatment date not reported Hemoglobin Disease Other = 25 days	7 cases or 10 % treated between 0-30 days 15 or 22% treated between 31-60 days of age 8 or 12% treated between 61-90 days of age 8 or 12% treated at > 90 days of age 29 or 43% age of treatment unknown/not reported 1 case reported 16-30 days 2 cases reported 31 - 45 days

Amino Acid, Fatty Acid Oxidation Disorders and Organic Acidemias (Tandem Mass Spec)

South Dakota 2006 Intervention Data	U.S. 2006 Intervention Data
Goal age for treatment/intervention initiation: As early as possible, upon positive screening result - parent education/consultation	States reported data 48
# diagnosed/treated: 5 (3* reported to NNSGRC) Fatty Acid Oxidation Disorders: CPT II = 1, findings reported to SDNSP 2008 MCAD* = 2 VLCAD* = 1 Inconclusive Testing = 1 Carrier - MCAD = 1 Amino Acid Disorders = 0 Organic Acidemias = 0	* MCAD cases diagnosed/treated = 203 (states reporting = 48) * VLCAD cases diagnosed /treated = 40 (states reporting = 40)
Average age at intervention: 11.5	64 cases or 31% treated by 7 days of age 51 or 25% treated between 8-14 days of age 17 or 8% treated between 15-21 days of age 23 or 11% treated at > 21 days of age 48 or 24% age of treatment unknown/not reported
Range of ages at intervention: 9-14	Range of ages at treatment initiation: <3 - > 21 days

PKU - Phenylketonuria (Classical PKU)

South Dakota 2006 Intervention Data	U.S. 2006 Intervention Data
Goal age for treatment initiation: as soon as possible, by 14 days of age.	States reported data = 48
# diagnosed/treated: 1	# cases = 170
Initiation of treatment = 13 days of age	73 cases or 43% treated by 7 days of age 75 or 44% treated between 8-14 days of age 9 or 5% treated between 15-21 days of age 13 or 8% treated at > 21 days of age 10 or 6% age of treatment unknown/not reported
Ranges of ages at intervention: N/A	Range of ages at treatment initiation: <3 - > 21 days

Data Source: http://www2uthscsa.edu/nnsis/ data obtained 12/05/2007

Colorectal Cancer in South Dakota

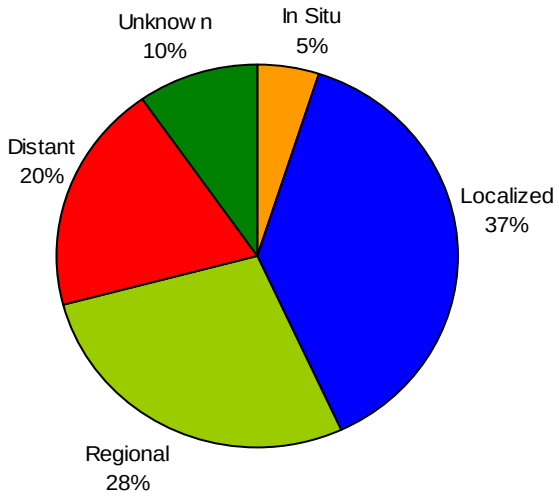
By Mary Sarvis, Data Manager, SD Cancer Registry, Department of Health
Kay Dosch, CTR, Cancer Registry Coordinator, SD Cancer Registry, Department of Health

The South Dakota Cancer Registry has released the 2005 colorectal cancer data. For 2001-2005, the average number of new colorectal cancer cases per year is 502 and the average number of annual deaths due to colorectal cancer is 172.

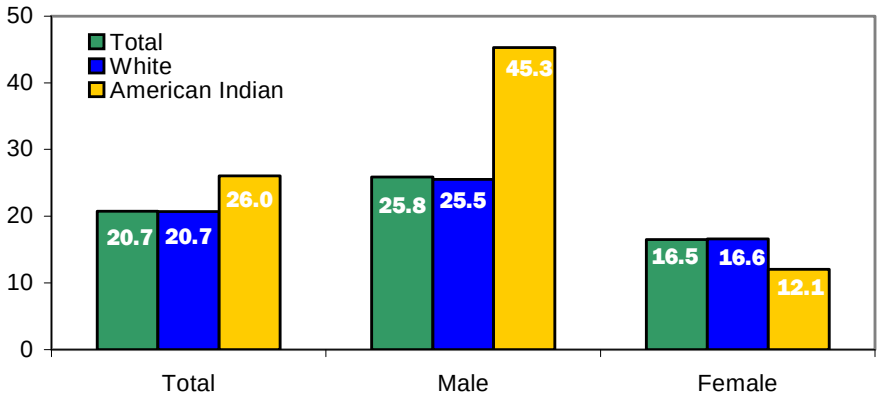
Incidence 2005		**Mortality 2005**	
Number of cases		Number of deaths	
Total	456	Total	176
Males	230	Males	91
Females	226	Females	85
White	435	White	169
American Indian	17	American Indian	7
Median age at diagnosis	71 yrs	Median age at death	76 yrs
Mode	84 yrs	Mode	73 yrs
Age range at diagnosis	28-98 yrs	Age range at death	35-100 yrs
SD age-adjusted incidence rate	55.4	SD age-adjusted death rate	20.7
US SEER age-adjusted incidence rate (2004)	*48.2	US SEER age-adjusted death rate (2004)	*17.9

Rates per 100,000 U.S. 2000 standard population
* 2005 US SEER age-adjusted rates not available

The circle graph at the right displays the SEER Summary Stage at diagnosis for 2005 colorectal cancer cases. As shown, almost half of the cases were diagnosed at the more advanced stages of regional and distant. Patient survival rates decline when diagnosed at a more advanced stage.



See below for the age-adjusted colorectal cancer incidence rate by race and gender in South Dakota for 2005. As shown, the rate for American Indian males is significantly higher than for White males.



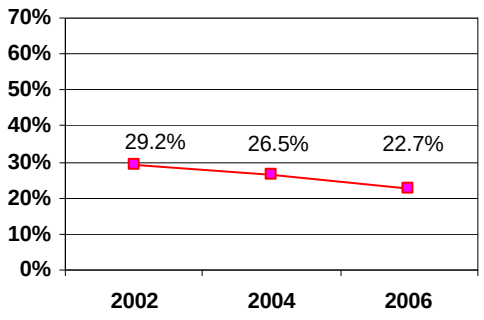
Source: South Dakota Department of Health

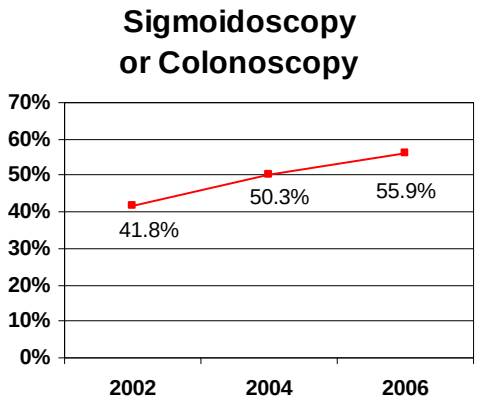
Colorectal Cancer Screening

The Healthy People 2010 Objective 3-12 is to increase the proportion of adults who receive a colorectal cancer screening examination. The 2010 target is 50% of the applicable population for each of the following screenings.

- **a.** Adults aged 50 years and older who have received a fecal occult blood test (FOBT) within the preceding two years.
- **b.** Adults aged 50 years and older who have ever received a sigmoidoscopy or colonoscopy.

The percentage of fecal occult blood tests is declining in South Dakota; while the reverse is occurring with sigmoidoscopy/colonoscopy screenings. See below for the percentages within South Dakota.





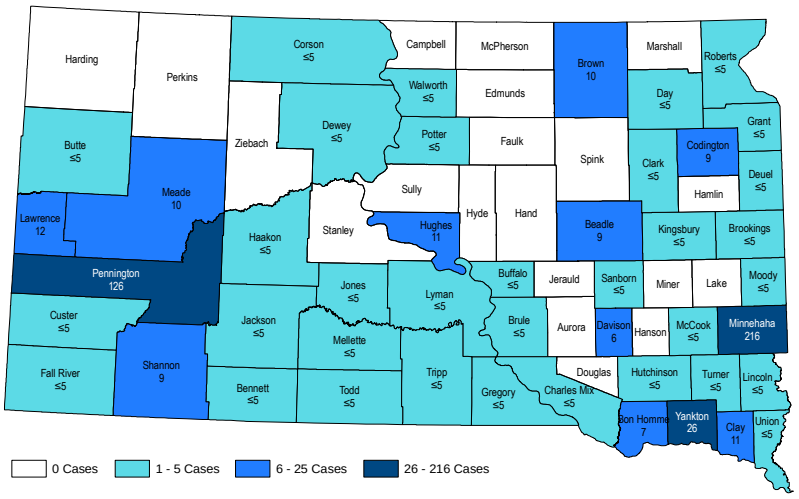
Source: Behavior Risk Factor Surveillance System

For additional information, please contact Kay Dosch, Cancer Registry Coordinator, at 605-773-6345 or 800-592-1861 or see the website: http://doh.sd.gov/SDCR/Default.aspx.

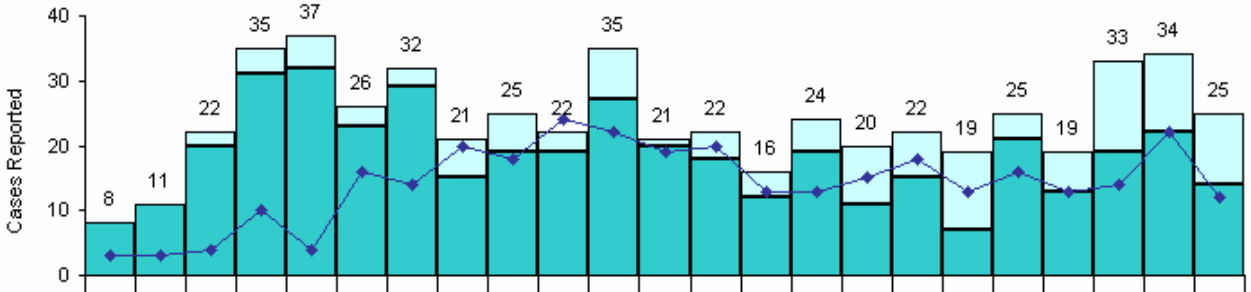
South Dakota HIV/AIDS Surveillance Report
January 2008

Five hundred fifty-four cumulative cases of HIV/AIDS were reported to the South Dakota Department of Health from 1985 through December 2007. Twenty-five new HIV/AIDS cases were reported in 2007. Fourteen of these cases were male and 11 cases were female. There are an estimated 340 people living with HIV/AIDS in South Dakota, 71% male and 29% female. Blacks and American Indians are disproportionately affected by HIV/AIDS with Blacks comprising 20% of the living cases and American Indians 16%, when they comprise <1% and 9% of the population, respectively.

South Dakota Residents Reported Infected with HIV/AIDS: Cumulative Cases by County, 1985 - 2007



South Dakota Residents Diagnosed by Gender with HIV and AIDS, 1985-2007



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total	8	11	22	35	37	26	32	21	25	22	35	21	22	16	24	20	22	19	25	19	33	34	25
HIV (Females)	0	0	2	4	5	3	3	6	6	3	8	1	4	4	5	9	7	12	4	6	14	12	11
HIV (Males)	8	11	20	31	32	23	29	15	19	19	27	20	18	12	19	11	15	7	21	13	19	22	14
AIDS diagnosis	3	3	4	10	4	16	14	20	18	24	22	19	20	13	13	15	18	13	16	13	14	22	12

At the end of 2007, 554 SD residents had been reported with HIV (425 male, 129 female) and 326 of those had also been diagnosed with AIDS. Some cases may have been reported as an HIV case in a different year than they were diagnosed with AIDS

Characteristics of South Dakota HIV/AIDS Infected Persons as of December 31, 2007

	Total HIV/AIDS Diagnoses *Total number of persons diagnosed with HIV or AIDS*		Persons Living with HIV/AIDS *Minimum estimate of persons living with HIV or AIDS*	
	Cases	**Percent**	**Cases**	**Percent**
TOTAL	554	100%	340	100%
Sex				
Male	425	77%	241	71%
Female	129	23%	99	29%
Ethnicity				
American Indian	91	16%	53	16%
Black	77	14%	69	20%
Hispanic and Other **	21	4%	15	4%
White	365	66%	203	60%
Country of Origin				
United States	497	90%	286	84%
Other	57	10%	54	16%
Age Group	(Age at HIV Diagnosis)		(Age December 31, 2007)	
< 2 years	7	1%	1	1%
2-12 years	6	1%	3	1%
13-24 years	80	14%	18	5%
25-44 years	369	67%	171	50%
45-65 years	91	16%	138	41%
>65	1	1%	9	2%
Exposure Category				
Heterosexual	109	20%	90	26%
IDU	85	15%	55	16%
MSM	233	42%	121	36%
MSM & IDU	24	4%	10	3%
Perinatal/Pediatric	9	2%	3	1%
Transfusion/Hemophilia	20	4%	10	3%
Unspecified	74	13%	51	15%
HIV Planning Region				
American Indian	27	5%	15	4%
Black Hills	163	29%	98	29%
Central	25	5%	13	4%
Northeast	46	8%	22	7%
Southeast	284	51%	192	56%
Unknown/Other***	9	2%	0	0%

Department of Health Confidential HIV Testing Centers
or call Toll Free 1-800-592-1861

Aberdeen
402 S. Main St.
Aberdeen, SD 57401
605-626-2373
1-866-805-1007

Rapid City
909 E. St. Patrick
Rapid City, SD 57701
605-394-2289
1-866-474-8221

Watertown
913 5th St. SE
Watertown, SD 57201
605-882-5096
1-866-817-4090

Sioux Falls
1200 N. West Ave.
Sioux Falls, SD 57104
605-367-5365
1-866-315-9214

Pierre
302 E Dakota
Pierre, SD 57501
605-773-5348
1-866-229-4927

Dupree
Ziebach County
Court House
Dupree, SD 57623
605-365-5164

CDC HOTLINE
1-800-232-4636

Percentages may not add up to 100% due to rounding.
**Hispanic and Other denotes cases that are Asian, Hispanic, or Multi-race.
***Unknown/Other denotes cases in which the HIV/AIDS county is unknown or in a state other than South Dakota.

School Height and Weight Report

For South Dakota Students
2006-2007 School Year

For the full report, see http://doh.sd.gov/SchoolWeight
For additional information, see www.healthysd.gov

South Dakota Department of Health
February 2008

The South Dakota Department of Health, in cooperation with the South Dakota Department of Education has analyzed height and weight data on students since the 1998-1999 school year. This pamphlet summarizes the report of the data collected during the 2006-2007 school year.

Schools voluntarily submit height and weight measurements. Data collected for the 2006-2007 year was collected for 31% percent of the state's students from 241 schools, which is 28 percent of the state's attendance centers. While American Indians comprise 15 percent of the South Dakota enrollment population, they represent 11 percent of the respondents in this report. Schools and/or school districts who submitted measurements on 100 or more students are receiving school specific and/or district specific data along with the aggregate data in the full report.

Overweight And Obese

Data is analyzed for short stature, underweight, overweight and obesity using the current national standards. This pamphlet focuses on excess weight as South Dakota students as a whole are neither short nor underweight. The definition of obese and overweight have changed from previous reports.

Definitions:

Obese: At or above the 95th percentile BMI-for-age when compared to children of the same age and gender.

Overweight: 85th to 94th percentile BMI-for-age when compared to children of the same age and gender.

Information in previous reports should not be compared to the full report or this summary pamphlet due to this definition change. The recommended cutoff points have not changed and will not affect prevalence rates of the BMI categories.

BMI-for-age is an excellent screening tool and the data presented here is for surveillance purposes. To determine if an individual student who is above the 95th percentile BMI-for-age is obese, the child's physician should make that determination.

Risk of Pediatric Obesity

Obesity in children and adolescents is associated with increased risk of psychological or psychiatric problems, cardio-vascular risk factors, chronic inflammation, type 2 diabetes mellitus, and asthma. Excess weight usually persists into adulthood. The higher the BMI in childhood the greater the chance the child will be obese when an adult.

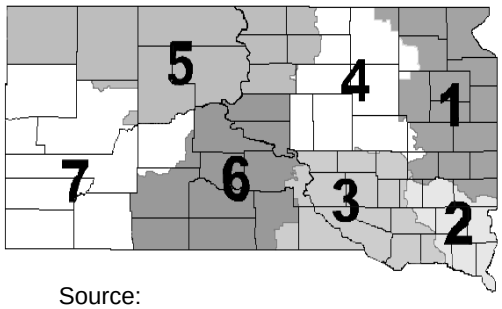
Health Goals

The national Healthy People 2010 objective is to reduce the percentage of children over the age of six who are obese to 5%. The South Dakota Department of Health 2010 Initiative performance indicator is to "reverse the trend and reduce the percentage of school-age children and adolescents above the 95th percentile from 17% in 2003 to 15% by 2010". Though this report shows a slight decrease from the levels during the 2005-2006 school year, much work needs to be done to reach these goals.

School Year 2006-2007 Overweight And Obese Body Mass Index For Age				
Age	Number Of Students	Overweight	Obese	Overweight And Obese Combined
5-8 years	14,383	15.7%	14.5%	30.2%
9-11 years	12,477	16.9%	17.2%	34.1%
12-14 years	11,047	17.0%	16.9%	33.9%
15-19 years	3,672	17.9%	18.5%	36.4%
Total	41,579	16.6%	16.3%	32.9%

School Year 2006-2007 Overweight And Obese Body Mass Index For Age, By Race				
Race	Number of Students	Overweight	Obese	Overweight And Obese Combined
White	33,765	16.2%	14.5%	30.7%
American Indian	**4,584**	20.0%	26.8%	46.8%
Other Races	**1,960**	15.4%	16.9%	32.3%
Race Unknown	**1,270**	15.5%	19.4%	32.3%
Total	**41,579**	16.6%	16.3%	32.9%

School Year 2006-2007 Overweight and Obese Body Mass Index For Age, By Gender				
Gender	Number of Students	Overweight	Obese	Overweight and Obese Combined
Female	20,359	16.9%	14.7%	31.6%
Male	21,220	16.3%	17.8%	34.1%



Source:
South Dakota Department of Education

School Year 2006-2007 Overweight And Obese Body Mass Index, By Region				
Region	Number of Students	Overweight	Obese	Overweight And Obese Combined
1	9,321	17.5%	15.7%	33.2%
2	**9,622**	15.8%	13.6%	29.4%
3	**3,105**	17.9%	19.7%	37.6%
4	**6,343**	17.2%	18.4%	35.6%
5	1,238	**17.7%**	22.5%	40.2%
6	2,644	**17.9%**	20.5%	38.4%
7	**9,306**	**15.2%**	15.1%	30.3%
Total	**41,579**	16.6%	16.3%	32.9%

Regional Data

This report provides data reported by the seven educational service agency regions. The composition of the regions varies in racial and age distribution. See the full report for school locations and additional information.

Education service agency region 2 is the only region significantly below the state rate for obesity. Regions 3, 4, 5, and 6 are significantly higher than the state rate. Regions 1 and 7 are not significantly different as they fall within the statewide statistical range.

How Can South Dakota Reverse This Trend

There are many things everyone in South Dakota can do to reduce excess weight in children and adolescents. For more ideas, see the full report. For ways South Dakota schools have successfully reversed the trend, see Success Stories under the schools tab on www.healthysd.gov website.

Research shows six science-based strategies to prevent obesity and other chronics diseases:

- *Increase physical activity*
- *Decrease television viewing*
- *Increase fruit and vegetable intake*
- *Decrease sweetened beverage intake*
- *Decrease portion sizes, and*
- *Increase breastfeeding*

School Height Weight Schedule

September Start collecting height and weight data.
Apply for scales and measuring boards if needed.

October Participate in South Dakota Schools Walk.
See http://doe.sd.gov/oess/schoolhealth/sdwalks/index.asp for more information.

January Check out http://www.healthysd.gov website especially the Schools tab. Site is updated monthly. Look for Healthy Challenges three times a year.

March Celebrate National Nutrition Month ®. 2008 theme is "Nutrition: It's a Matter of Fact". See www.eatright.org for more information.

April Plant a school garden.

April Hold special events to celebrate Turn Off TV Week.

June 15 Submit data from the previous year to the Department of Health.

July Hold community events to celebrate South Dakota Great Day of Play.

August 18-October 17 Participate in the Power Panther tour of South Dakota. See http://doe.sd.gov/oess/cans/nutrition for more information and to schedule a visit.

HEALTHYSD.GOV
Live Better. Grow Stronger.

South Dakota Department of Health - Infectious Disease Surveillance

Morbidity Report, 1 January – 29 February 2008

(provisional numbers) see http://doh.sd.gov/ID/site.aspx

Disease		2007 year-to-date	5-year median	Percent change
Vaccine-Preventable Diseases	Diphtheria	0	0	n/a
	Tetanus	0	0	n/a
	Pertussis	2	1	+100%
	Poliomyelitis	0	0	n/a
	Measles	0	0	n/a
	Mumps	0	0	n/a
	Rubella	0	0	n/a
	Haemophilus influenza type b	0	0	n/a
Sexually Transmitted Infections and Blood-borne Diseases	HIV infection	8	3	+167%
	Hepatitis B, acute	0	0	0%
	Chlamydia	475	417	+14%
	Gonorrhea	40	46	-13%
	Syphilis, early	0	0	0%
Tuberculosis	Tuberculosis	2	3	-33%
Invasive Bacterial Diseases	*Neisseria meningitides*	1	0	+100%
	Invasive Group A *Streptococcus*	3	2	+50%
Enteric Diseases	*E. coli*, Shiga toxin-producing	2	1	+100%
	Campylobacteriosis	18	12	+50%
	Salmonellosis	11	18	-39%
	Shigellosis	25	8	+213%
	Giardiasis	5	8	-38%
	Cryptosporidiosis	5	4	+25%
	Hepatitis A	1	1	0%
Vector-borne Diseases	Animal Rabies	2	7	-71%
	Tularemia	0	0	0%
	Rocky Mountain Spotted Fever	0	0	0%
	Malaria (imported)	0	0	0%
	Hantavirus Pulmonary Syndrome	0	0	0%
	Lyme disease	0	0	0%
	West Nile Virus disease	0	0	0%
Other Diseases	Legionellosis	1	0	+100%
	Streptococcus pneumoniae, drug-resistant	3	0	+300%
	Additionally, the following were reported: Chicken Pox (12); Group B *Strep*, invasive (1); Hepatitis B, chronic (0); Hepatitis C, chronic (49); MRSA, invasive (13).			

Communicable diseases are obligatorily reportable by physicians, hospitals, laboratories, and institutions. The **Reportable Diseases List** is found at http://doh.sd.gov/Disease/report.aspx or upon request. Diseases are reportable by telephone, fax, mail, website, or courier. **Secure website:** www.state.sd.us/doh/diseasereport **Telephones**: 24 hour answering device 1-800-592-1804; for a live person at any time call 1-800-592-1861; after hours emergency 605-280-4810. **Fax** 605-773-5509. **Mail** in a sealed envelope addressed to the DOH, Office of Disease Prevention, 615 E. 4th Street, Pierre, SD 57501, marked "Confidential Medical Report".

2,900 copies of this Bulletin were printed by the Department of Health at a cost of $0.00 per copy.